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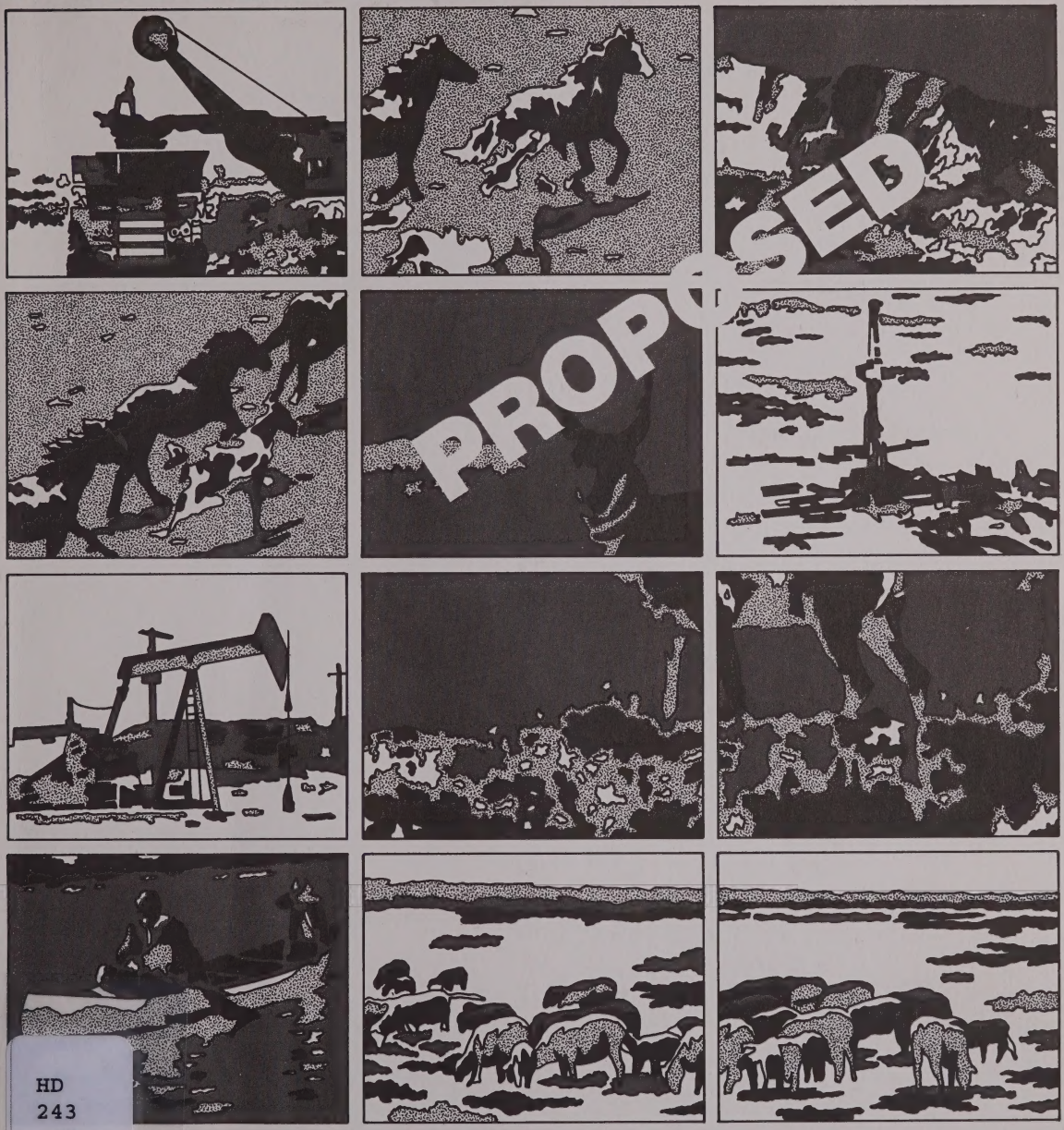
# PIONEER TRAILS AREA

# COAL

## Amendment to
## WYOMING Land Use Decisions

Kemmerer Resource Area
Rock Springs District

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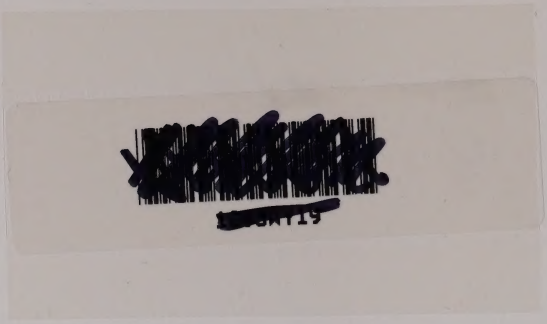

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Dear Reader:

This brochure summarizes the Pioneer Trails Management Framework Plan (MFP) proposed decisions for the Federal Coal Management Program in the Kemmerer Resource Area. It also describes the process used to develop these proposed decisions. Because this brochure is a summary, some of the detailed supportive data, including legal land descriptions, are not included. The illustrations included should not be used for detailed analysis or interpretation. Detailed information is available for public review in the Kemmerer Resource Area Office.

The basic field work behind this planning effort was performed by BLM personnel in coordination with other Federal, State, and local agencies; industry; and other interest groups. Many organizations and individuals have assisted us. We appreciate this assistance and we pledge to continue seeking full public participation as we develop the Federal Coal Management Program in the Rock Springs District.

We would like to solicit your comments concerning the proposed decisions contained in this brochure. An open house and public hearing will be held in Kemmerer on November 24, 1981 in the conference room of the BLM Kemmerer Resource Area Office. The open house will begin at 8:00 a.m. and conclude at 4:00 p.m. BLM staff will be available to answer questions on the proposed coal decisions. Following the open house, the public hearing will convene at 6:00 p.m. Anyone wishing to offer their written or verbal testimony on these decisions is encouraged to attend. Your testimony will become part of the official record.

Any written comments received during the 30-day public comment period, ending December 9, 1981, will also be made a part of the official record and will be taken into consideration in our preparation of the final coal management decisions. Anyone wishing to submit written comments or having any questions, may direct them to Gary McNaughton, Area Geologist, P.O. Box 632, Kemmerer, Wyoming 83101, phone (307) 877-3933.

Sincerely yours,

District Manager

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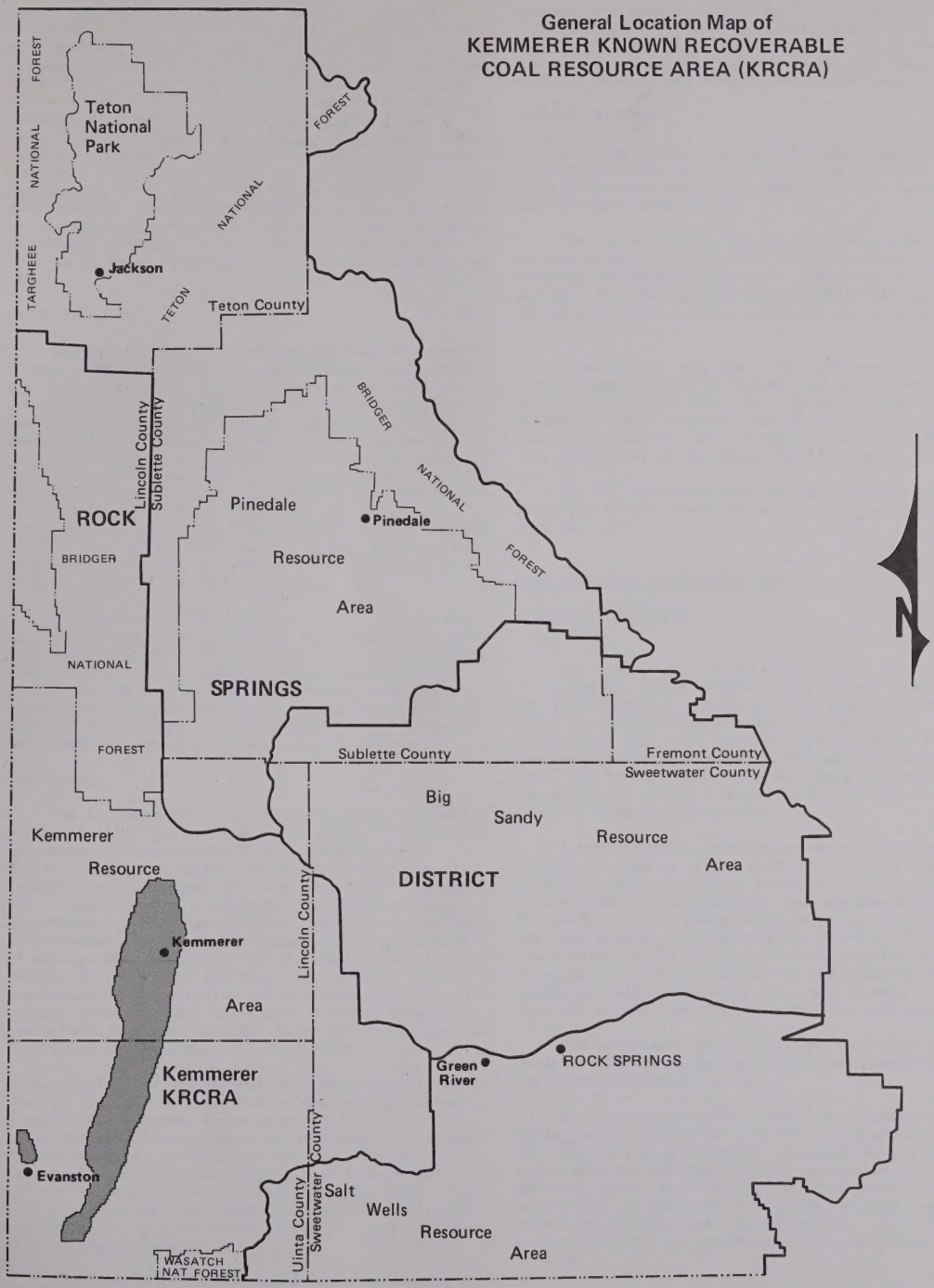
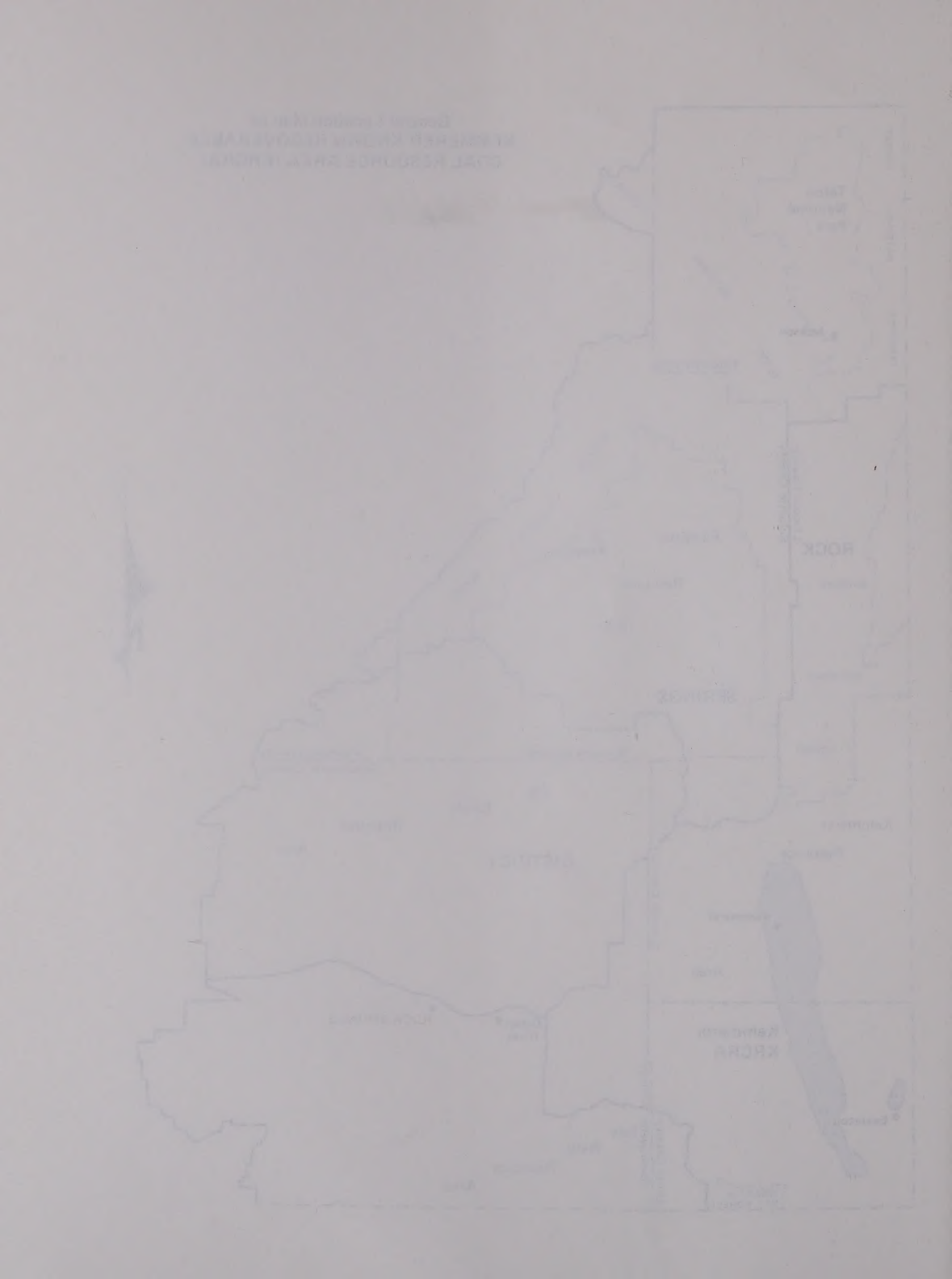
General Location Map of
KEMMERER KNOWN RECOVERABLE
COAL RESOURCE AREA (KRCRA)





## OVERVIEW

### INTRODUCTION

This brochure summarizes the proposed Federal coal management decisions for the Bureau of Land Management's Kemmerer Resource Area located in southwest Wyoming. Specifically, this will result in amending the Pioneer Trails Management Framework Plan (MFP). The process used to arrive at these proposed decisions is briefly explained. This summary is intended to aid the public in understanding the Federal Coal Management Program as it applies to the Kemmerer Resource Area and to show the requirements that must be met under Title 43 Code of Federal Regulations (CFR) 3400. The Bureau encourages public review of the proposed coal management decisions prior to their adoption and incorporation into the Bureau's planning documents. These planning documents (MFP) will guide resource management in this area during the 1980's.

### OBJECTIVE

Since the last MFP was completed for the Kemmerer Resource Area in 1977 (i.e., the Pioneer Trails MFP), the Secretary of the Interior has reviewed past policies for leasing Federal coal and has adopted a new Federal Coal Management Program. The objective in managing the Federal coal resource in the Kemmerer Resource Area is to (1) provide for both short and long range development of Federal coal in an orderly and timely manner, consistent with the new Federal Coal Management Program, policies, environmental integrity, national energy needs, and related demands; and (2) identify as much Federal coal as possible that is acceptable for development to help meet coal production goals for 1990 and beyond.

The purpose of this planning effort is to arrive at coal management decisions for the Kemmerer Resource Area that will (1) guide the allocation of the Federal coal resource development by both surface and subsurface mining methods; and (2) provide an analysis which can be used in considering areas for new competitive Federal coal leasing, proposals for lease modifications, emergency leases, and exchanges.

### BACKGROUND

Due to developments in the world energy situation during the last few years and the resulting effects on the national economy, accelerated production of domestic energy resources has become a high priority national goal. Current national policy is to decrease U.S. dependence upon foreign oil and achieve energy independence in the late 1980's. This policy includes development of other energy resources and conversion of energy resources to oil and gas uses, offsetting dwindling reserves of domestic oil and gas. The Department of the Interior and BLM have a major responsibility in the fulfillment of these energy goals through making Federal energy resources (coal in this instance) available for development.

In developing the new Federal Coal Management Program, several national coal production regions were established. The Kemmerer Resource Area lies within the Green River-Hams Fork region of northwestern Colorado and southcentral/southwestern Wyoming. The first coal lease sale under the new Federal Coal Management Program in this region was held in January 1981. The only Federal coal from Wyoming included in this sale was contained in a few lease tracts in the Hanna Basin area of Carbon County.

The October 1980 Secretarial Issue Document on coal leasing in the Green River-Hams Fork region recognized a shortfall in Federal coal leasing in 1981 and the need for an early followup lease sale, which is scheduled for March 1984. These lease sale dates were established to meet projected production goals necessary to meet energy demands in 1990. To meet these production goals BLM considered possible production from already producing Federal coal leases, from existing nonproducing leases, from noncompetitive Preference Right Lease Applications (none of these exist in the Kemmerer Resource Area), and from potential new competitive leasing of Federal coal.

### AREA DESCRIPTION

The area being reviewed for Federal coal development in the Kemmerer Resource Area is shown on the General Location Map of the Kemmerer Known Recoverable Coal Resource Area (KRCRA).

The review area is underlain by an estimated 35 million tons of Federal coal reserves with high or moderate development potential. This coal contains an average of 11,999 British Thermal Units (Btu's) of energy per pound and has an average sulfur content of 0.9%.

Some of this area has a checkerboard pattern with alternating sections of Federal and non-Federal land and coal ownership (Map 1-1). There are also areas of Federal surface ownership over State and privately owned coal and private surface ownership over Federally owned coal or so-called "split estate" lands.

The MFP Amendment does address existing nonproducing Federal coal leases as explained later in this brochure.

## COAL MANAGEMENT RECOMMENDATIONS

### (PROPOSED DECISIONS)

The following proposed Federal coal management decisions and the procedures used in their development are in accordance with the Mineral Leasing Act of 1920, the Federal Coal Leasing Amendments Act of 1976, the Federal Land Policy and Management Act of 1976, the Surface Mining Control and Reclamation Act of 1977, the Federal Coal Management Program adopted by the Secretary of the Interior in June 1979, and all relevant Federal regulations.

A more detailed description of the findings and procedures used to arrive at these proposed decisions is contained in subsequent sections of this brochure. Maps delineating the Federal coal management decisions for surface mining and subsurface mining for competitive Federal coal areas (Maps 1-4 and 1-5), and the results of the coal unsuitability review and multiple use conflict evaluation for existing nonproducing coal leases (Map 1-6), are located in the "Summary of the Coal Screening Process" section.

BLM recommends adoption of the following proposed decisions for managing the Federal coal resources in the Kemmerer Resource Area.

1. For competitive Federal coal areas with surface mining potential: Within the Kemmerer KRCRA, approximately 6,600 acres of unleased Federal coal are acceptable for coal development by surface mining methods. These areas should be given further consideration for new competitive Federal coal leasing, emergency leasing, lease modifications, and exchange proposals under the new Federal Coal Management Program.

2. For competitive Federal coal areas with

subsurface mining potential: Within the Kemmerer KRCRA, approximately 4,800 acres of unleased Federal coal are acceptable for coal development by subsurface mining methods. Approximately 800 of these acres are acceptable for only limited surface operations and impacts associated with subsurface mining (e.g., subject to restrictive placement and types of facilities, seasonal restrictions, etc.). These areas should be given further consideration for new competitive leasing, emergency leasing, lease modifications, and exchange proposals under the new Federal Coal Management Program.

3. For existing nonproducing coal leases (assessed for only surface mining potential): Any further actions on nonproducing leases are deferred until such time as mining and reclamation plans are submitted or until lease readjustments occur. Special attention will be given to those sensitive value areas identified through the coal unsuitability review and multiple use evaluation.

4. Keep the entire Kemmerer Resource Area open to coal resource inventory and exploration to aid in the identification of coal resources and their development potential. The conduct of exploration activities will be allowed only in a manner consistent with all current planning decisions and with appropriate stipulations to protect other resources.

## PROCEDURES

The Federal Coal Management Program established four major steps to be used in the identification of Federal coal areas that are acceptable for coal development. The four steps are: (1) identification of coal development potential; (2) application of the coal unsuitability criteria; (3) multiple use conflict evaluation; and (4) surface owner consultation. Collectively, these steps are called the "Coal Screening Process" (43 CFR 3420.2-3) and are applied in sequence to the review area.

The following is a description of each of these steps and how they were applied to the review area.

### STEP 1 - IDENTIFICATION OF COAL DEVELOPMENT POTENTIAL

Areas of known high and moderate coal development potential for both surface and subsurface mining were identified using Geological Survey Coal Resource Occurrence-Coal Development Potential (CRO-CDP) maps. Other areas assumed to have at least moderate development potential were also identified, using geological and economic data submitted by coal companies and interpretations of available geological data from various other sources. The areas of known and assumed high and moderate coal development potential are shown on Map 1-2.

High coal development potential areas for surface mining have a stripping ratio of 0 to 10 cubic yards of overburden per ton of coal. Moderate coal development potential areas for surface mining have a stripping ratio of 10 to 15 cubic yards of overburden per ton of coal. Areas of high and moderate coal development potential for subsurface mining methods are defined as areas underlain by coal beds at depths ranging from 200 to 1,000 feet and 1,000 to 2,000 feet respectively.

In applying this screening step, areas of low and unknown coal development potential within the review area were excluded from further consideration.

The remaining three screening steps are applied to those high and moderate coal development potential areas (both known and assumed) identified in Step 1. These latter steps are applied in sequence and only to the lands identified as acceptable for coal development in each preceding step. This results in (1) identifying areas that are acceptable for coal development in each of these 3 steps; and (2) identifying areas that are unsuitable (Step 2), unacceptable (Step 3), and unavailable (Step 4) for coal development. Finally, all Federal coal areas that pass through the screening process are determined to be acceptable for coal development by either surface or subsurface mining methods or both.

### STEP 2 - APPLICATION OF COAL UNSUITABILITY CRITERIA

As required by 43 CFR 3461, the 20 coal unsuitability criteria were applied to all known and assumed high and moderate coal development potential areas.

These criteria involve consideration of resource values such as scenic areas, natural and historic values, wildlife, floodplains, alluvial valley floors, etc. The purpose of this step is to identify areas with key features or environmental sensitivity that would make them unsuitable for surface coal mining, subsurface coal mining, or for surface operations and impacts associated with subsurface coal mining.

### STEP 3 - MULTIPLE USE CONFLICT EVALUATION

This step is a review of those Federal coal lands that remain acceptable after applying the coal unsuitability criteria. It involves consideration of other multiple use values (i.e., not concerned with the unsuitability criteria) and identifying any additional area that would be unacceptable for surface coal mining, subsurface coal mining, or for surface operations and impacts associated with subsurface coal mining.

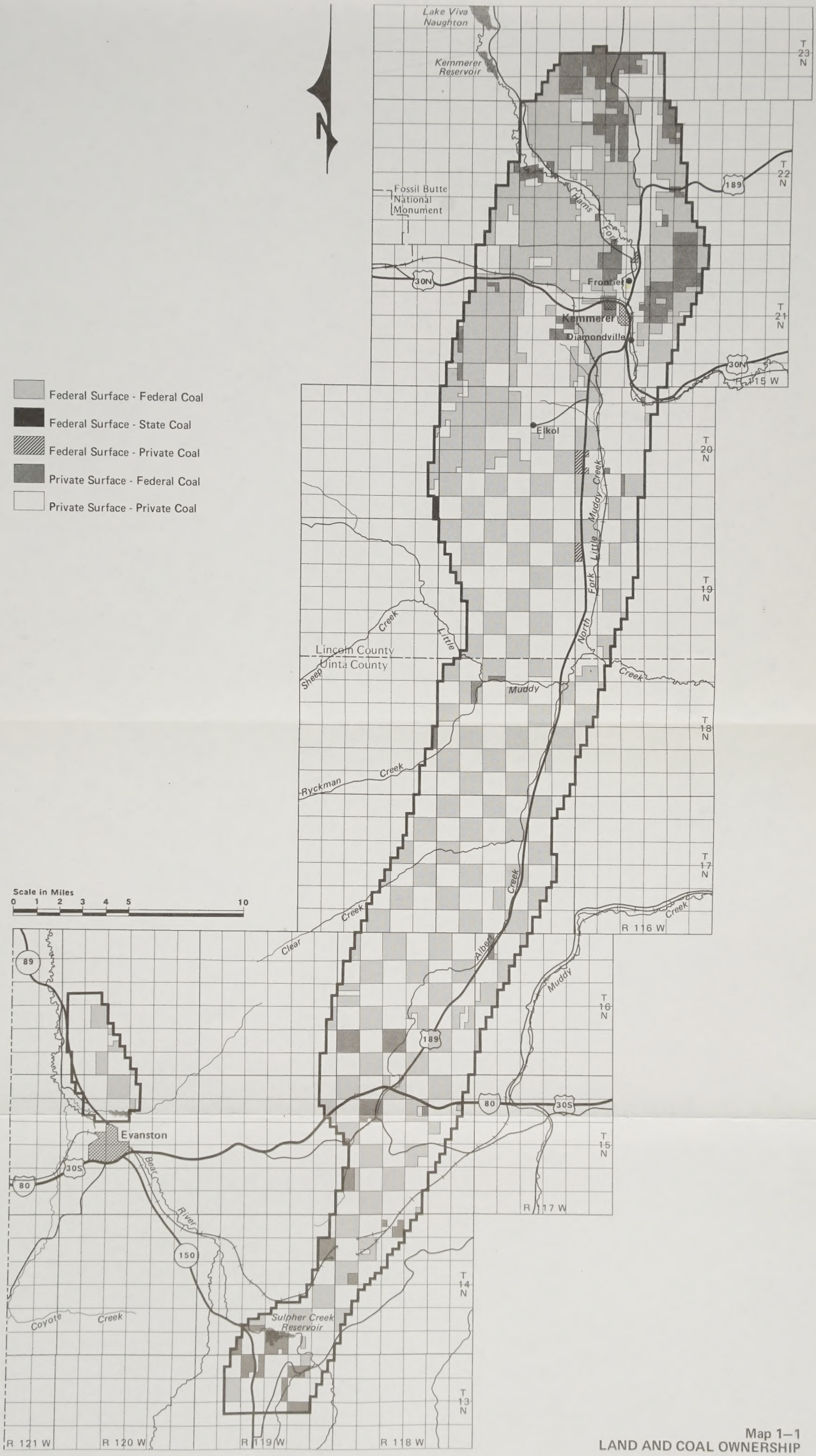
### STEP 4 - SURFACE OWNER CONSULTATION

Section 714 of the Surface Mining Control and Reclamation Act requires BLM to consult with certain "qualified" owners of split estate lands (i.e., private surface ownership over federally owned coal) when surface mining of the Federal coal is being considered. This step does not apply to areas where only subsurface mining methods are concerned. It involves only those split estate lands within competitive Federal coal areas that remain acceptable for development by surface mining methods after conducting the multiple use conflict evaluation.

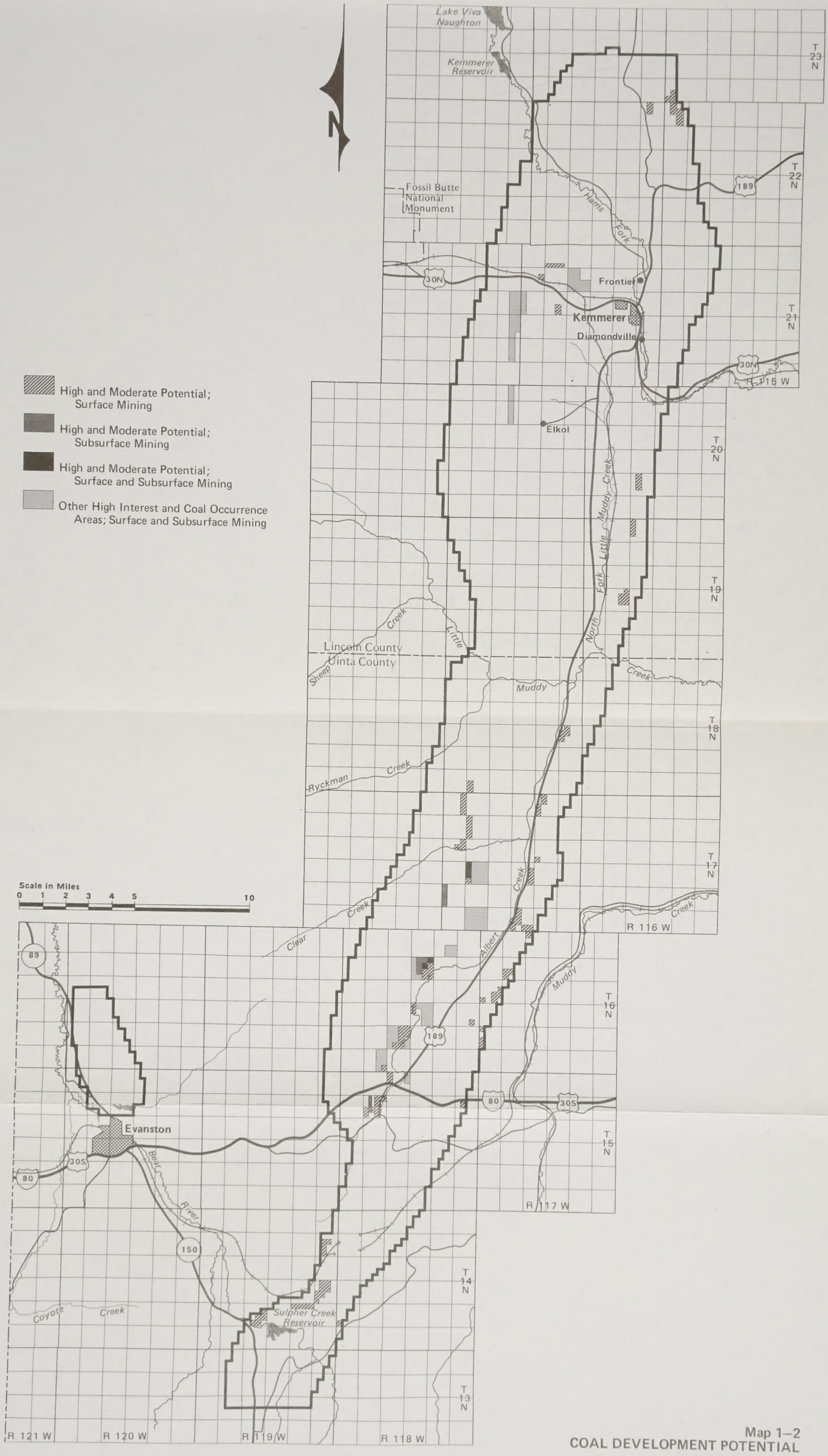
In this consultation process, qualified surface owners are asked to express their preference for or against surface mining of the Federal coal under their private lands. Either an individual or significant numbers of these surface owners expressing a preference against surface mining, can result in identifying split estate lands as unavailable for coal development. Such areas can still be considered for possible leasing beyond this land use planning stage. This is possible because the actual commitment of surface owner consent or refusal to consent does not occur until later in the coal activity planning process, prior to offering a lease for the Federal coal involved.

## HOW THE PROCEDURES WERE APPLIED

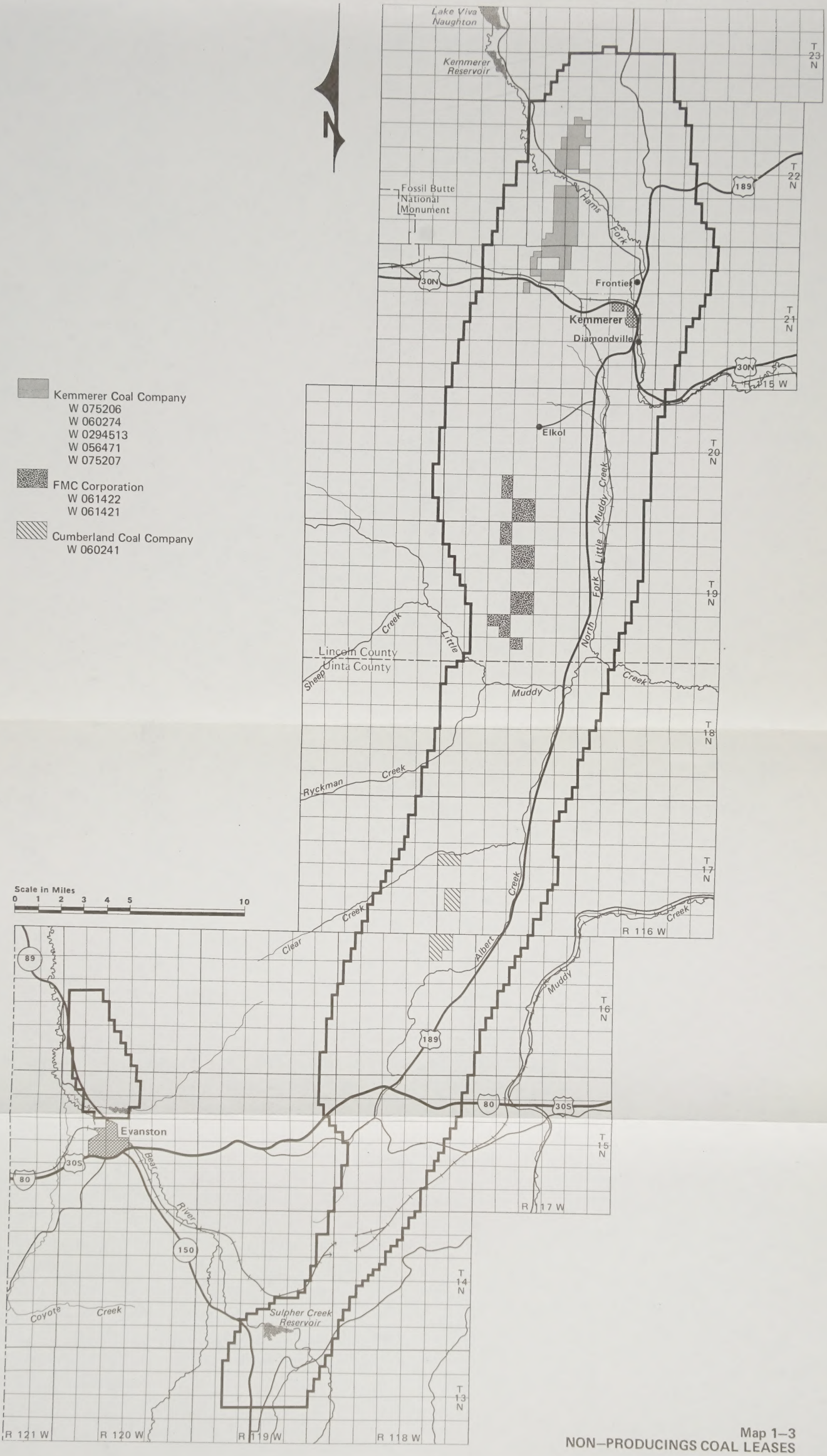
The coal screening steps were applied to competitive Federal coal areas, and nonproducing coal leases. Competitive coal areas are those with the potential to be considered for new competitive Federal coal leasing, modifications to existing leases, emergency leasing, and exchanges.




Map 1–1
LAND AND COAL OWNERSHIP




Map 1–2
COAL DEVELOPMENT POTENTIAL




Map 1–3
NON–PRODUCINGS COAL LEASES

COMPETITIVE FEDERAL COAL AREAS (SURFACE MINING)

All four steps of the screening process are applicable to these areas.

COMPETITIVE FEDERAL COAL AREAS (SUBSURFACE MINING)

Only steps 1-3 of the screening process are applicable to these areas.

NONPRODUCING COAL LEASE AREAS (SURFACE MINING)

Only steps 2 and 3 of the screening process are applicable to these areas. Map 1-3 shows the nonproducing leases within the Kemmerer Resource Area. From currently available information, none of the nonproducing leases are intended to be developed by subsurface mining methods. Thus, BLM assessed only the worst case (surface mining) possibility. Should lease holders decide in the future to use subsurface mining methods, any unsuitability determinations involved will be reviewed and adjusted as necessary.

Under the new Federal Coal Management Program, BLM is required to apply the coal unsuitability criteria to all existing Federal coal leases (both nonproducing and producing leases) either at the time of land use planning, submission of mining and reclamation plans, or when the lease readjustment period occurs. Producing coal leases are not addressed here, but will be handled on a case by case basis at the time of cyclic lease readjustment.

As a matter of efficiency and timing, BLM elected to conduct the unsuitability criteria application and the multiple use conflict evaluation for the nonproducing leases during land use planning. This will serve as a basic resource analysis for later use in developing necessary stipulations and mitigation requirements for mining and reclamation plans and lease readjustment.

Note: Unsuitability criteria 9-15 were not applied to the nonproducing leases. This was a result of a civil suit action filed by Texaco, Incorporated, and the National Coal Association, et al. vs. Cecil D. Andrus, Secretary, Department of the Interior, et al. A United States District Court decision on this action, in favor of the plaintiffs, was filed on August 15, 1980. The decision remands several parts of the coal regulations to the Secretary concerning his authority to apply some of the unsuitability criteria to existing leases. The decision was subsequently appealed by BLM and has not been fully resolved. However, BLM has conceded that unsuitability criteria 9-15 are not applicable to existing producing or nonproducing leases.

## FINDINGS

The following is a summary of the findings and related recommendations resulting from conducting the coal screening process. All acreage and coal tonnage figures are approximate. Additional documentation and background information, explaining in detail how the procedures were used and the findings made, are available for public review at BLM's Rock Springs District and Kemmerer Resource Area Offices.

COAL DEVELOPMENT POTENTIAL

Table 1-1 (located at the end of this section) summarizes the findings of Step 1 - Federal coal development potential. See also Map 1-2.

UNSUITABILITY CRITERIA

The following discussion briefly explains the findings resulting from application of each unsuitability criterion. Tables 1-2 and 1-3 (located at the end of this section) list the findings by criterion, and Tables 1-4 and 1-5 (also located at the end of this section) summarize the overall results of the application of the unsuitability criteria. Maps 1-4, 1-5, and 1-6 also show the overall summary results of applying the criteria.

Criterion #1 - Federal Land Systems

No areas were determined to be unsuitable under this criterion.

Criterion #2 - Rights-of-Way and Easements

Competitive Federal Coal Areas

Eighteen (18) acres containing .08 million tons of coal were determined to be unsuitable for surface mining methods. The right-of-way involved is Interstate 80 (400-foot right-of-way on highway, 800-foot at interchanges).

Nonproducing Coal Lease Areas

Fifteen (15) acres containing .06 million tons of coal were determined to be unsuitable for surface mining. The right-of-way involved is the Bridger Power Line (460-foot right-of-way).

Criterion #3 - Buffer Zones for Rights-of-Way, Communities, and Buildings

Competitive Federal Coal Areas

Five (5) acres containing .02 million tons of coal were determined to be unsuitable for surface mining methods. The right-of-way involved is Interstate 80.

Nonproducing Coal Lease Areas

No areas were determined to be unsuitable in nonproducing lease areas.

Criterion #4 - Wilderness Study Areas

No areas were determined to be unsuitable under this criterion.

Criterion #5 - Scenic Areas

No areas were determined to be unsuitable under this criterion.

Criterion #6 - Lands Used for Scientific Study

No areas were determined to be unsuitable under this criterion.

Criterion #7 - Historic Lands and Sites

Segments of the Oregon National Historic Trail, Mormon Pioneer National Historic Trail, California Trail, and Sublette Cutoff are located in the Kemmerer Resource Area. These sites plus a 1/4-mile buffer zone were determined to be unsuitable for surface mining. Also, three other sites, with no buffer zone, were determined to be unsuitable for surface mining. The combined effect of these sites upon the coal areas are as follows:

Competitive Federal Coal Areas

Three hundred sixty (360) acres containing 1.5 million tons of coal were determined to be unsuitable for surface mining methods.

Nonproducing Lease Areas

Five hundred eighty-five (585) acres containing 2.5 million tons of coal were determined to be unsuitable for surface mining.

Formal consultation with the Wyoming State Government is in progress on this criterion. Final results, if different from the above, will be reflected in the final coal decisions at a later date.

Criterion #8 - Natural Areas

No areas were determined to be unsuitable under this criterion.

Criterion #9 - Federally Listed Endangered Species Habitat

No areas were determined to be unsuitable under this criterion.

Criterion #10 - State Listed Endangered Species Habitat

No areas were determined to be unsuitable under this criterion.

Formal consultation with the Wyoming State Government is in progress on this criterion. Final results, if different from the above, will be reflected in the final coal decisions at a later date.

Criterion #11 - Bald and Golden Eagle Nests

Eagle nests and appropriate buffers were identified by the Fish and Wildlife Service, BLM, and the Wyoming Game and Fish Department.

Competitive Federal Coal Areas

Four hundred seventy-nine (479) acres containing 2.0 million tons of coal were determined to be unsuitable for surface mining.

Note: 10 of these acres overlap with unsuitable areas under criterion #7 and 293 of these acres overlap with unsuitable areas under criterion #13.

Thirteen (13) acres are acceptable for only limited surface operations and impacts associated with subsurface mining (e.g., subject to restrictive placement and types of facilities, seasonal restrictions, etc.).

Nonproducing Coal Lease Areas

No acres were determined to be unsuitable in nonproducing lease areas.

Criterion #12 - Bald and Golden Eagle Roost and Concentration Areas

No areas were determined to be unsuitable under this criterion.

Criterion #13 - Falcon Cliff Nesting Sites

Competitive Federal Coal Areas.

Seven hundred nineteen (719) acres containing 3.1 million tons of coal were determined to be unsuitable for surface mining.

Note: 10 of these acres overlap with unsuitable areas under Criterion #7.

One hundred eighty-eight (188) acres are acceptable for only limited surface operations and impacts associated with subsurface mining (e.g., subject to restrictive placement and types of facilities, seasonal restrictions, etc.).

Note: These 188 acres overlap with portions of the 719 acres mentioned above.

Nonproducing Coal Lease Areas

No areas were determined to be unsuitable in nonproducing lease areas.

Criterion #14 - Migratory Bird Habitat

Competitive Federal Coal Areas

Nine hundred five (905) acres containing 3.8 million tons of coal were determined to be unsuitable for surface mining.

Note: These 905 acres overlap with unsuitable areas under Criteria #11 and #13.

Two hundred one (201) acres are acceptable for only limited surface operations and impacts associated with subsurface mining (e.g., subject to restrictive placement and types of facilities, seasonal restrictions, etc.).

Note: These 201 acres coincide with the 13 acres under Criterion #11 and the 188 acres under Criterion #13 with the same limitations.

Nonproducing Coal Lease Areas

No areas were determined to be unsuitable in nonproducing lease areas.

Criterion #15 - Habitat for State High-Interest Wildlife

Competitive Federal Coal Areas

One thousand sixty-four (1,064) acres containing 4.5 million tons of coal were determined to be unsuitable for surface mining.

Five hundred forty-eight (548) acres are acceptable for only limited surface operations and impacts associated with subsurface mining (e.g., subject to restrictive placement and types of facilities, seasonal restrictions, etc.).

Note: These 548 acres overlap with portions of the 1,064 acres mentioned above.

Nonproducing Coal Lease Areas.

No areas were determined to be unsuitable in nonproducing lease areas.

Formal consultation with the Wyoming State Government is in progress on this criterion. Final results, if different from the above, will be reflected in the final coal decisions at a later date.

Criterion #16 - Floodplains

Competitive Federal Coal Areas

No areas were determined to be unsuitable in competitive coal areas.

Nonproducing Coal Lease Areas

Fifty-five (55) acres containing .2 million tons of coal were determined to be unsuitable for surface mining. The Hams Fork valley is the area involved.

Criterion #17 - Municipal Watersheds

No areas were determined to be unsuitable under this criterion.

Criterion #18 - National Resource Waters

No areas were determined to be unsuitable under this criterion.

Criterion #19 - Alluvial Valley Floors

Competitive Federal Coal Areas

Seventy-eight (78) acres containing .3 million tons of coal were determined to be unsuitable for surface mining.

Note: Thirty-one (31) of these acres overlap with areas under Criteria #15 that are either unsuitable for surface mining or that have limitations for surface operations and impacts associated with subsurface mining.

Fifty-three (53) acres are acceptable for only limited surface operations and impacts associated with subsurface mining (e.g., subject to restrictive placement and types of facilities, seasonal restrictions, etc.).

Note: These 53 acres overlap with portions of the 78 acres and the 31 acres mentioned above.

Nonproducing Coal Lease Areas

Fifty-five (55) acres containing .2 million tons of coal were determined to be unsuitable for surface mining. The Hams Fork valley is the area involved.

Note: These 55 acres coincide with the 55 acres determined to be unsuitable for surface mining under Criterion #16.

Formal consultation with the Wyoming State Government is in progress on this criterion. Final results, if different from the above, will be reflected in the final coal decisions at a later date.

Criterion #20 - State Proposed Criterion

No areas were determined to be unsuitable under this criterion.

Formal consultation with the Wyoming State Government is in progress on this criterion. Final results, if different from the above, will be reflected in the final coal decisions at a later date.

EVALUATION OF OTHER MULTIPLE USE CONFLICTS

A multiple use evaluation was done on the areas that remained acceptable after applying the coal unsuitability criteria. No significant multiple use conflicts were identified. Thus, no additional areas have determined to be unacceptable for surface or subsurface mining, or for surface operations and impacts associated with subsurface mining in this screening step.

SURFACE OWNER CONSULTATION (SURFACE MINING)

At this time surface owner consultation is still in progress. Some areas of private surface--Federal coal were determined to be unsuitable under application of the coal unsuitability criteria. Regarding the remaining acceptable split estate areas, any changes that may result from qualified surface owners expressing a preference against surface mining on their lands will be reflected in the final MFP coal decisions at a later date.

Note: Surface owner consultation applies only to private surface--Federal coal (split estate) lands within competitive Federal coal areas where only surface mining is being considered.

SUMMARY of the COAL SCREENING PROCESS

Tables 1-4 and 1-5 and Maps 1-4, 1-5, and 1-6 contain the results of the coal screening process. These results were used to formulate the proposed decisions described earlier in this brochure.

ACTIONS to FOLLOW

Following the public comment period for the proposed Federal coal management planning decisions contained in this brochure, the decisions will be finalized. During the public comment period, a public meeting and hearing will be held. A summary brochure of the final decisions will be mailed to those parties who have received a copy of the proposed decision brochure and anyone requesting a copy. Following publication of the final decisions, a 30 day protest period will be provided.

Competitive coal areas found to be acceptable for Federal coal development will be further considered for leasing through the competitive leasing program, emergency leasing, lease modifications, or exchanges.

TABLE 1-1

Federal Coal Development Potential
(Competitive Coal Areas)

| | ACRES | | TONS[1/] (1,000,000) |
|---|---|---|---|
| 1. High and & Moderate potential for 2/ | | | |
| A. Surface Mining Methods | 4,803 | | 20.4 |
| B. Subsurface Mining Methods | 550 | | 3.8 |
| C. Surface & Subsurface Mining Methods (overlap) | 200 | (surface) | .8 |
| | | (subsurface) | 1.4 |
| 2. Other areas assumed to have Moderate Potential for Surface & Subsurface Mining Methods 3/ | 4,235 | (surface) | 14.1 |
| | | (subsurface) | 29.0 |

1/ Tonnage computation for this and all other tables was based upon an average of 4,248 tons per acre for surface mining methods (100% recovery) and 6,846 tons per acre for subsurface mining methods (50% recovery). These averages were derived from high and moderate coal development potential areas as identified by Geological Survey CRO-CDP maps and open file reports.

2/ Derived from Geological Survey CRO-CDP Maps.

3/ Derived from indications of industry interest and other available resource data.

Table 1-2

Application of Unsuitability Criteria
Competitive Federal Coal Areas

| Criteria | Surface Mining Methods[1] | | | | Subsurface Mining Methods[2] | | | |
|---|---|---|---|---|---|---|---|---|
| | Unsuitable | | Acceptable | | Unsuitable | | Acceptable | |
| | Acres | Tons (1,000,000) | Acres | Tons (1,000,000) | Acres | Tons | Acres | Tons (1,000,000) |
| 1. Federal Land Systems | 0 | 0 | 9,038 | 38.4 | 0 | 0 | 4,785 | 32.8 |
| 2. Rights-of-Way & Easements | 18 | .08 | 9,020 | 38.3 | 0 | 0 | 4,785 | 32.8 |
| 3. Buffer Zones for Rights-of-Way, Communities & Buildings | 5 | .02 | 9,033 | 38.4 | 0 | 0 | 4,785 | 32.8 |
| 4. Wilderness Study Areas | 0 | 0 | 9,038 | 38.4 | 0 | 0 | 4,785 | 32.8 |
| 5. Scenic Areas | 0 | 0 | 9,038 | 38.4 | 0 | 0 | 4,785 | 32.8 |
| 6. Land Used for Scientific Study | 0 | 0 | 9,038 | 38.4 | 0 | 0 | 4,785 | 32.8 |
| 7. Historic Lands & Sites | 360 | 1.5 | 8,678 | 36.9 | 0 | 0 | 4,785 | 32.8 |
| 8. Natural Areas | 0 | 0 | 9,038 | 38.4 | 0 | 0 | 4,785 | 32.8 |
| 9. Federally Listed Endangered Species Habitat | 0 | 0 | 9,038 | 38.4 | 0 | 0 | 4,785 | 32.8 |
| 10. State Listed Endangered Species Habitat | 0 | 0 | 9,038 | 38.4 | 0 | 0 | 4,785 | 32.8 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 11. Bald & Golden Nests | 479 | 2.0 | 8,559 | 36.4 | 0 | 0 | 4,785<br>2/ 13 | 32.8 |
| 12. Bald & Golden Eagle Roost & Concentration Areas | 0 | 0 | 9,038 | 38.4 | 0 | 0 | 4,785 | 32.8 |
| 13. Falcon Cliff Nesting Sites | 719 | 3.1 | 8.319 | 35.3 | 0 | 0 | 4,785<br>2/ 188 | 32.8 |
| 14. Migratory Bird Habitat | 905 | 3.8 | 8,133 | 34.5 | 0 | 0 | 4,785<br>2/ 201 | 32.8 |
| 15. Habitat for State High-Interest Wildlife | 1,064 | 4.5 | 7,974 | 33.9 | 0 | 0 | 4,785<br>3/ 548 | 32.8 |
| 16. Floodplains | 0 | 0 | 9,038 | 38.4 | 0 | 0 | 4,785 | 32.8 |
| 17. Municipal Watersheds | 0 | 0 | 9,038 | 38.4 | 0 | 0 | 4,785 | 32.8 |
| 18. National Resource Waters | 0 | 0 | 9,038 | 38.4 | 0 | 0 | 4,785 | 32.8 |
| 19. Alluvial Valley Floors | 78 | .3 | 8,960 | 38.1 | 0 | 0 | 4,785<br>2/ 53 | 32.8<br>32.8 |
| 20. State-Proposed Criteria | 0 | 0 | 9,038 | 38.4 | 0 | 0 | 4,785 | 32.8 |

1/ The acres and Federal coal tonnages listed under each criterion occasionally overlap areas and tonnages found unsuitable under other criteria. Thus the total acres excluded from development by all the unsuitability criteria will be less than the sum of the individual listings under each criterion.

2/ This portion of the total acreage assessed for subsurface mining is acceptable for only limited surface operations and impacts associated with subsurface mining (e.g., subject to restrictive placement and types of facilities, seasonal restrictions, etc.). Tonnages are not affected, since subsurface mining "itself" is still acceptable under these areas.

TABLE 1-3

Application of Unsuitability Criteria
Non-Producing Coal Lease Areas

(Assessed for Surface Mining Methods Only)

| Criterion | Unsuitable[1] Acres | Unsuitable[1] Tons[2] (1,000,000) | Acceptable[1] Acres | Acceptable[1] Tons[2] (1,000,000) |
|---|---|---|---|---|
| 1. Federal Land Systems | 0 | 0 | 8,793 | 37.4 |
| 2. Rights-of-Way and Easements | 15 | .06 | 8,778 | 37.3 |
| 3. Buffer Zones for Rights-of-Way, Communities, Buildings | 0 | 0 | 8,793 | 37.4 |
| 4. Wilderness Study Areas | 0 | 0 | 8,793 | 37.4 |
| 5. Scenic Areas | 0 | 0 | 8,793 | 37.4 |
| 6. Land Used for Scenic Study | 0 | 0 | 8,793 | 37.4 |
| 7. Historic Land & Sites | 585 | 2.5 | 8,208 | 34.9 |
| 8. Natural Areas | 0 | 0 | 8,793 | 37.4 |
| 9. Federally Listed Endangered Species Habitat | 0 | 0 | 8,793 | 37.4 |
| 10. State Listed Endangered Species Habitat | 0 | 0 | 8,793 | 37.4 |
| 11. Bald & Golden Eagle Nests | 0 | 0 | 8,793 | 37.4 |
| 12. Bald & Golden Eagle Roost & concentration Areas | 0 | 0 | 8,793 | 37.4 |

| | | | | |
|---|---|---|---|---|
| 13. Falcon Cliff Nesting Sites | 0 | 0 | 8,793 | 37.4 |
| 14. Migratory Bird Habitat | 0 | 0 | 8,793 | 37.4 |
| 15. Habitat for State High-Interest Wildlife | 0 | 0 | 8,793 | 37.4 |
| 16. Floodplains | 55 | .2 | 8,738 | 37.1 |
| 17. Municipal Watersheds | 0 | 0 | 8,793 | 37.4 |
| 18. National Resource Waters | 0 | 0 | 8,793 | 37.4 |
| 19. Alluvial Valley Floors | 55 | .2 | 8,738 | 37.1 |
| 20. State Proposed Criteria | 0 | 0 | 8,793 | 37.4 |

Note: Wildlife Criteria (9-15) are not applicable to non-producing leases.

1/ The acres and Federal coal tonnages listed under each criterion occasionally overlap areas and tonnages found unsuitable under other criteria. Thus the total acres excluded from development by all the unsuitable criteria will be less than the sum of the individual listings under each criterion.

2/ See footnote 1/ on Table 1-1.

TABLE 1 - 4

Summary - Application of Unsuitability Criteria
Competitive Federal Coal Areas

| Determination | Federal Surface Federal Coal | | Private Surface Federal Coal | | Total Federal Coal | |
|---|---|---|---|---|---|---|
| | Acres | Tons[1/] (1,000,000) | Acres | Tons[1/] (1,000,000) | Acres | Tons[1/] (1,000,000) |
| AREAS WITH SURFACE MINING POTENTIAL | | | | | | |
| Unsuitable | 1,881 | 8.0 | 516 | 2.2 | 2,397 | 10.2 |
| Acceptable | 5,849 | 24.8 | 792 | 3.4 | 6,641 | 28.2 |
| AREAS WITH SUBSURFACE MINING POTENTIAL | | | | | | |
| Unsuitable | 0 | 0 | 0 | 0 | 0 | 0 |
| Acceptable | 4,425 | 30.3 | 360 | 2.5 | 4,785 | 32.8 |
| SURFACE OPERATIONS AND IMPACTS ASSOCIATED WITH SUBSURFACE MINING | | | | | | |
| Unsuitable | 0 | 0 | 0 | 0 | 0 | 0 |
| Acceptable | 3,916 | 30.3 | 98 | 2.5 | 4,014 | 32.8 |
| Acceptable with Limitations 2/ | 509 | N/A | 262 | N/A | 771 | N/A |

1/ See footnote 1/ on Table 1-1.

2/ This portion of the total acreage assessed for subsurface mining is acceptable for only limited surface operations and impacts associated with subsurface mining (e.g., subject to restrictive placement and types of facilities, seasonal restrictions, etc.). Tonnages are not affected, since subsurface mining "itself" is still acceptable under these areas.

TABLE 1 - 5

Summary of Results - Coal Screening Process

| Coal Screening Process | Competitive Federal Coal | | | | Non-Producing Coal Lease Areas | |
|---|---|---|---|---|---|---|
| | Surface | | Subsurface | | Surface Mining Only | |
| | Acres | Tons 1/ (1,000,000) | Acres | Tons 1/ (1,000,000) | Acres | Tons 1/ (1,000,000) |
| Known and Assumed High & Moderate Coal Development Potential | 9,038 | 38.4 | 4,785 | 32.8 | N/A | N/A |
| Unsuitable Area | 2,397 | 10.2 | 0 | 0 | 655 | 2.8 |
| Unacceptable Area | 0 | 0 | 0 | 0 | 0 | 0 |
| Unavailable Area 2/ | 0 | 0 | N/A | N/A | N/A | N/A |
| Total Area and Federal Coal Eliminated | 2,397 | 10.2 | 0 | 0 | 655 | 2.8 |
| Remaining Area and Federal Coal Acceptable for Coal Development | 6,641 | 28.2 | 4,785 3/ | 32.8 | 8,138 | 34.6 |

1/ See footnote 1/ on Table 1-1.

2/ The surface owner consultation has not been completed, no acres have been excluded. Any changes in this situation will be reflected in the final coal management decisions at a later date.

3/ Seven hundred seventy-one (771) of these acres are acceptable for only limited surface operations and impacts associated with subsurface mining (e.g., subject to restrictive placement and types of facilities, seasonal restrictions, etc.). Tonnages are not affected.

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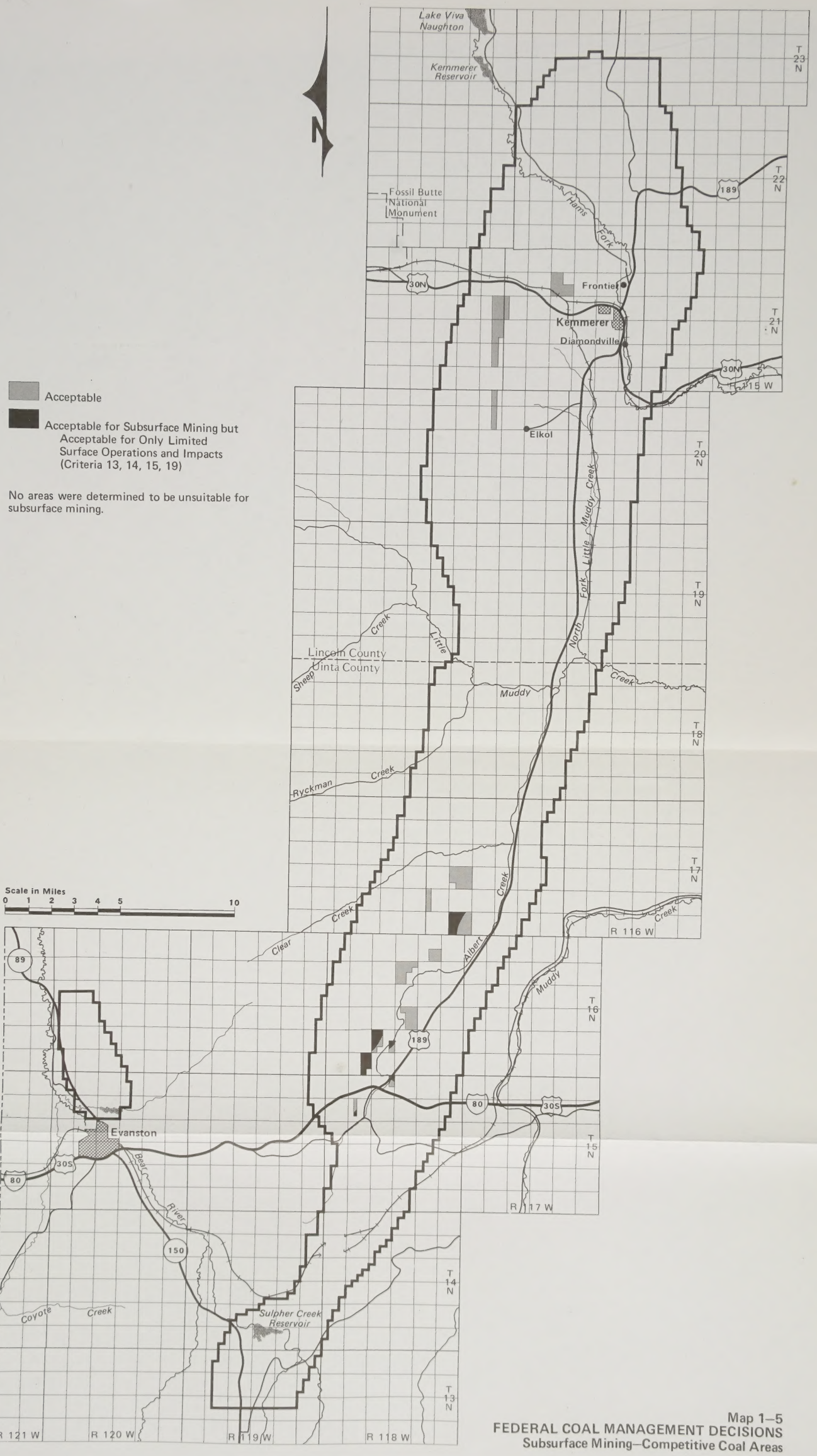
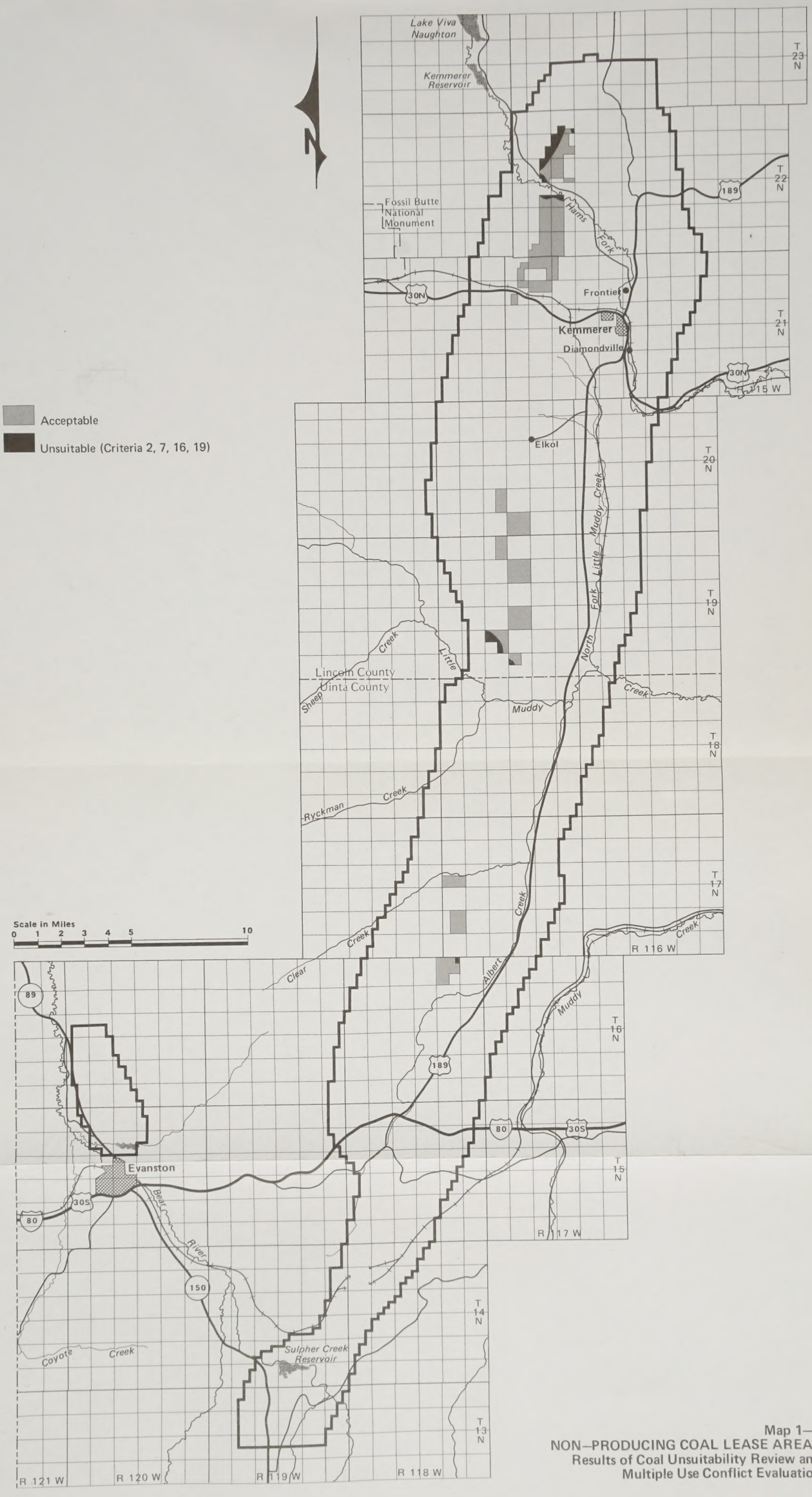
**Map 1–4**
**FEDERAL COAL MANAGEMENT DECISIONS**
**Surface Mining—Competitive Coal Areas**




Map 1–5
FEDERAL COAL MANAGEMENT DECISIONS
Subsurface Mining–Competitive Coal Areas




Map 1–6
NON–PRODUCING COAL LEASE AREAS
Results of Coal Unsuitability Review and
Multiple Use Conflict Evaluation

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